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II Introduction to raw materials in AP

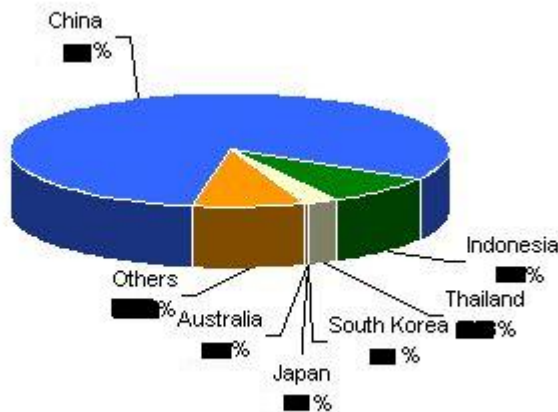
AP is an important agricultural production area worldwide with about 20 countries from three regions, namely East Asia, Southeast Asia and Southwest Pacific. Based on statistical data from Food and Agriculture Organization of the United Nations (FAO) in 2010, the yield of AP's five agricultural products, including corn, potato, tapioca, wheat and sweet potato, accounts for █%, █%, █%, █% and █% of the global total respectively in 2009.

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II.1 Corn

In AP, East Asia, is with █% of planting area, is the major corn producer providing █% of total corn yield, among which China accounts for about █%. The country imports corn mainly from the U.S. when needed. Japan and South Korea are two major corn importers, whose yield account for only █% and █% respectively, and satisfy their domestic demand mainly through imports from the U.S. and China.

Figure II.1.1 Major countries' market shares of corn by yield in AP, 2009



Source: CCM International

Table II.1.1 Basic situation of corn in AP, 2009

Country	Yield, '000 tonne	Planting area, '000 ha.	Per unit area yield, t/ha.
China	█	█	█
Indonesia	█	█	█
Thailand	█	█	█
Japan	█	█	█
South Korea	█	█	█
Australia	█	█	█
Total	█	█	█

Source: CCM International

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III Modified starch in major countries

III-1 Overview

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III-2 China

III-2.1 Brief introduction to modified starch industry

Modified starch industry in China started to develop around 30 years ago. China is the second largest modified starch production base in the world, following the U.S. With booming economy and increasing demand, output of modified starch in China reaches █ million tonnes in 2009, which was █ million tonnes in 1999.

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Table III-2.1.1 Output of native starch and modified starch in China, 1979-2009, '000 tonne

Year	Native starch	Modified starch
1979	█	█
1989	█	█
1999	█	█
2009	█	█
CAGR (1999-2009)	█	█

Source: CCM International

Accuracy: 90% Min.

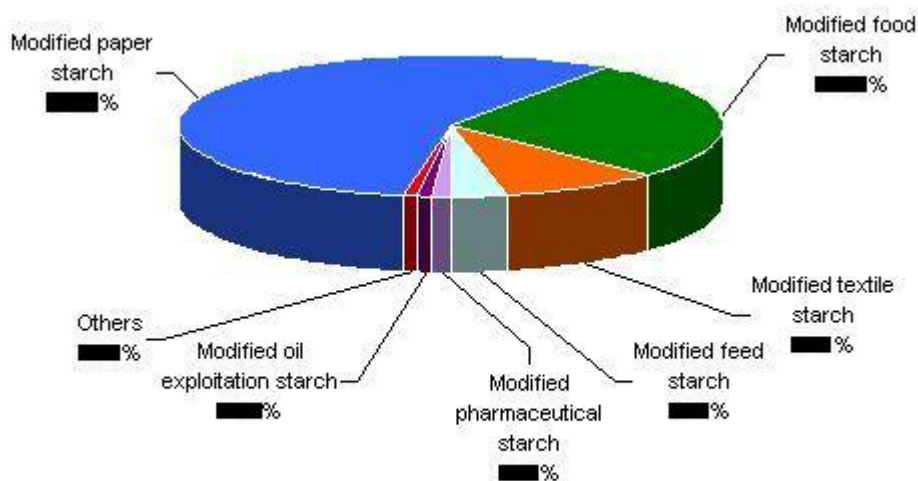
III-2.1 Production situation

China's total capacity of modified starch reaches █ million t/a in 2010. Modified paper starch, modified food starch and modified textile starch are the top three largest species according to their output, accounting for █%, █% and █% respectively of total modified starch output in the country in 2009.

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Modified starch manufacturers adopt wet method or dry method to produce modified starch in China. The production is widely distributed in different areas in the country, especially those regions with stable supply of raw material. Corn, tapioca, potato and wheat are the most important feedstocks. With large planting area and high yield, corn accounts for around 90% of total feedstock supply of modified starch in China.

Figure III-2.2.1 Market share of output of major modified starch by application in China, 2009



Source: CCM International

Accuracy: 90% Min.

Table III-2.2.1 Output of major specifications of modified starch in China, 2009, '000 tonne

Modified starch	Output
Oxidized starch	█
Starch ether	█
Starch ester	█
Acid treated starch	█
Crosslinked starch	█
Pregelatinized starch	█
Acetylated distarch phosphate	█
Subtotal	█
Others	█
Total	█

Source: CCM International

Accuracy: 80%-90%

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